

Title (en)  
Heat and fire insulation material

Title (de)  
Hitze- und Feuerisoliermaterial

Title (fr)  
Matériau isolant du feu et de la chaleur

Publication  
**EP 1818359 A1 20070815 (DE)**

Application  
**EP 07001944 A 20070130**

Priority  
DE 102006006941 A 20060214

Abstract (en)  
In high-temperature resistant coating and molding composition forming ceramic on pyrolysis, comprising (A) 65-30 (wt.%) polymer matrix based on dimethylsiloxane, (B) 15-50% silicon dioxide (SiO<sub>2</sub>), (C) 1-12 wt.% silicon carbide, (D) 0.5-10% carbon, ceramic or silicate fibers of average length 0.5-12 mm and (E) 2.5-25% highly disperse metal oxide selected from SiO<sub>2</sub>, titanium dioxide and zirconium dioxide, with average particle size (B) 2-50, (C) 1-15, (E) 0.01-2 µm, (E) has 0.1-8% surface coating compatible with (A).

Abstract (de)  
Die Erfindung betrifft eine Zusammensetzung für hochtemperaturfeste, pyrolytisch keramisierende Beschichtungen und Formteile aus einer Matrix aus einem Silikonharz, Siliciumdioxid, Siliciumcarbid, Fasern und einem hochdispersen Metalloxid, vorzugsweise Siliciumdioxids, das eine mit der Silikonmatrix verträgliche Oberflächenbeschichtung aufweist.

IPC 8 full level  
**C08K 3/00** (2006.01); **C04B 35/14** (2006.01); **C04B 35/565** (2006.01); **C04B 35/634** (2006.01); **C04B 35/638** (2006.01); **C08L 83/04** (2006.01); **C08K 3/14** (2006.01); **C08K 3/22** (2006.01); **C08K 3/36** (2006.01); **C08K 7/10** (2006.01)

CPC (source: EP US)  
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Citation (search report)

- [YD] EP 0878520 A2 19981118 - FRAUNHOFER GES FORSCHUNG [DE]
- [Y] DE 19540623 A1 19970507 - INST NEUE MAT GEMEIN GMBH [DE]
- [Y] US 4031059 A 19770621 - STRAUSS ERIC L
- [A] DE 4213637 A1 19921029 - DOW CORNING GMBH [DE]
- [A] PATERSON J R ET AL: "USE OF FILLERS TO ENHANCE THE FLAME RETARDANT AND ABLATIVE PROPERTIES OF SILICONE ELASTOMERS", 1983 PLASTICS & RUBBER INST, LONDON, ENGL, 1983, GB, pages 17. 1 - 17. 12, XP009081773

Cited by  
CN104862689A; CN113637325A; CN111117475A; CN111320873A; US9771994B2; CN108350966A; FR2974806A1

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